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(21) International Application Number: PCT/CA95/00467 (22) International Filing Date: 2 August 1995 (02.08.95) (30) Priority Data: 2,130,762 24 August 1994 (24.08.94) CA (60) Parent Application or Grant (63) Related by Continuation US 08/200,309 (CIP) Filed on 23 February 1994 (23.02.94) (71) Applicant (for all designated States except US): HYAL PHARMACEUTICAL CORPORATION [CA/CA]; 2425 Skymark Avenue, Mississauga, Ontario L4W 4Y6 (CA). (72) Inventors; and (75) Inventors/Applicants (for US only): TURLEY, Eva, Anne [CA/CA]; Apartment #217, 167 Bannatyne Avenue, Winnipeg, Manitoba R3B 0R4 (CA). ASCULAI, Samuel, Simon [US/CA]; Apartment #TH13, 53 McCaul Street, Toronto, Ontario M6M 2B6 (CA). (74) Agents: HUGHES, Ivor, M. et al.; Suite 200, 175 Commerce Valley Drive West, Thornhill, Ontario L3T 7P6 (CA).		(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 11 April 1996 (11.04.1996)
(54) Title: TREATMENT OF DISEASE AND CONDITIONS ASSOCIATED WITH MACROPHAGE INFILTRATION IN PARTICULAR STROKE AND MYOCARDIAL INFARCTION		
(57) Abstract <p>Use of hyaluronic acid and/or salts thereof for the treatment of a human having a disease or condition characterized by macrophage, neutrophile or other white blood cell infiltration into an area damaged by the disease or condition, wherein said use comprises the use of an effective amount of hyaluronic acid and/or salts thereof for a period of time until such use is no longer required.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 95/00467

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 A61K31/725

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO,A,91 04058 (NORPHARMCO INC) 4 April 1991	11-14
Y	see page 61, paragraph 1; claims 1-6,46-80,82,139; examples XX,XL see page 59, paragraph 4-6 see page 34, line 5 - page 35, line 30 ---	1-10,13, 15-33
X	EP,A,0 557 118 (NORPHARMCO INC) 25 August 1993 see page 2-3; claims 1-18 ---	1,2,11, 12,15, 16,25,26
Y	US,A,4 725 585 (WENGE PER S W ET AL) 16 February 1988 see the whole document ---	1-10, 15-33
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	J. CLIN. INVEST., vol. 88, November 1991 pages 1622-1628, A. WALDENSTRÖM ET AL. 'Accumulation of hyaluronan and tissue edema in experimental myocardial infarction' see page 1622 see page 1627-8 ---	1-10, 15-33
Y	TEX. REP. BIOL. MED., vol. 39, 1979 pages 339-355, M.R. SHETLAR ET AL. 'Healing of myocardial infarction in animal models' see page 344-345 see page 348 see page 352 ---	1-10, 15-33
X,Y	EP,A,0 197 718 (FIDIA SPA) 15 October 1986 see page 6-16 ---	13
X	WO,A,93 16732 (NORPHARMCO INC) 2 September 1993 see page 75; example 1C -----	11,12

INTERNATIONAL SEARCH REPORT

...information on patent family members

Inter/ nal Application No

PCT/CA 95/00467

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO-A-9104058	04-04-91	AP-A- 175	03-04-92
		AT-T- 131068	15-12-95
		AU-B- 5227493	03-03-94
		AU-B- 6433090	18-04-91
		CN-A- 1051503	22-05-91
		DE-D- 69024039	18-01-96
		EP-A- 0445255	11-09-91
		EP-A- 0656213	07-06-95
		HU-A- 64699	28-02-94
		JP-T- 4504579	13-08-92
		LT-A,B 1582	26-06-95
EP-A-0557118	25-08-93	CA-A- 2061567	21-08-93
US-A-4725585	16-02-88	NONE	
EP-A-0197718	15-10-86	AU-B- 592077	04-01-90
		BE-A- 904547	03-10-86
		CH-A- 672886	15-01-90
		DE-D- 3689384	27-01-94
		DE-T- 3689384	07-07-94
		EP-A- 0555898	18-08-93
		FR-A- 2579895	10-10-86
		JP-A- 61236732	22-10-86
		LU-A- 86386	02-09-86
		NO-B- 174277	03-01-94
		US-A- 5166331	24-11-92
		US-A- 4736024	05-04-88
		US-A- 5442053	15-08-95
		HU-B- 208833	28-01-94
WO-A-9316732	02-09-93	CA-A- 2061703	21-08-93
		AU-B- 3488893	13-09-93
		CN-A- 1084064	23-03-94
		EP-A- 0626863	07-12-94
		FI-A- 943789	03-10-94
		JP-T- 7506812	27-07-95
		NO-A- 943044	19-10-94
		SK-A- 11193	09-09-93